Claims

1. Apparatus support structure (V) for container handling machines, particularly for bottle filling machines, with at least entry and exit stars (A, Z, D), where each star is arranged on a support housing (1) and can be driven from the inside of the support housing, and where a star configuration (K) is defined by the relative positioning of the stars, within which configuration the support housing (1) is fixed above the floor plane (B) and beneath the transport plane (T) in a support structure (S) which stands on the floor, characterized in that the support structure (S) is a pipe and/or profile frame (6), which is substantially horizontal and defines the fixation plane (F), and which consists of the sections (7) and the floor feet (8), which are connected to each other at nodes (N), preferably in each case by detachable means, either directly or via a support housing (1), where in the feet the support housing (1) stands freely and is arranged in such a manner that open areas (15) are formed around the support housing, and in that at least some sections (7) can be combined with each other and with the support housings (1) preferably in such a manner that the star configuration (K) can be changed as desired.

2. Apparatus support structure according to Claim 1, characterized in that, in addition to the stars (A, Z, D), at least one additional container handling component (E1, E2, E3), such as a closing device, an inspection device, a labeling machine or similar device, is fixed at a node (N) of the pipe or profile frame (6).

3. Apparatus support structure according to Claim 1, characterized in that in addition to the stars (A, Z, D), at least one additional container handling component (L) is fixed, such as, a conveyor, a splash removing device or similar device on sections (7) and/or at nodes (N) of the pipe and profile frame (6).

4. Apparatus support structure according to at least one of the preceding claims, characterized in that the stars (A, Z, D) and optionally each additional container handling component (E1, E2, E3, L) are arranged inside of the external circumference which is defined by externally located sections (7) of the pipe and profile frame (6).

5. Apparatus support structure according to Claim 1, characterized in that – in a top view with viewing direction towards the floor – the thickness of the section (7) is smaller than the diameter of the support housing (1) and of the feet (8).

6. Apparatus support structure according to Claim 1, characterized in that the sections (7) of the pipe frame (6) are straight stainless steel pipes or round solid profiled parts, preferably having identical external diameters.

7. Apparatus support structure according to Claim 1, characterized in that the sections (7) of the profile frame (6) are profiled parts whose bottoms are open, and whose surfaces pointing away from the floor are curved or flat and slanted towards the floor.

8. Apparatus support structure according to Claim 1, characterized in that each section (7) presents at least one joining end (9), which fits with a connection interface (11) of a support housing (1) or of a foot (8).

9. Apparatus support structure according to Claim 1, characterized in that individual sections (7) in the pipe or profile frame (6) present blunt impact or mitered impact joining ends (9').

10. Apparatus support structure according to Claim 1, characterized in that the joining places in the pipe or profile frame (6) have an external flat design and contain internal connection elements (12).

11. Apparatus support structure according to Claim 1, characterized in that at least some stars (A, Z, D) present individual drives (17) accommodated in their support housings

(1), and preferably consisting of electrical servo motors with drive systems or of electrical direct drive motors, and in that control and supply strands (16) leading to the individual drive systems are arranged preferably in sections (7) of the pipe and profile frame (6).

12. Apparatus support structure according to Claim 1, characterized in that beneath the fixation plane (F) of the pipe and profile frame (6), on the bottom sides of the support housings (1), drive wheels (4), such as sprocket wheels, toothed wheels or belt toothed wheels are arranged free-standing, connected via overhung drive devices (5) with a central drive system.

13. Apparatus support structure according to Claim 1, characterized in that, drive (17) accommodated in the support housings (1) can be driven by drive strands (5') placed in sections (7).

14. Apparatus support structure according to Claim 1, characterized in that each support housing (1) presents a narrow upper part (1a), which preferably tapers upward, and a broadened foot part (1b), and is mounted with a foot part (1b) on a bottom housing (1c), which forms the node (N) of the pipe and profile frame (6), where on the bottom housing at least two section connecting interfaces (11) are provided, which are offset about the axis.

15. Apparatus support structure according to Claim 1, characterized in that, in or on the pipe or profile frame (6), at least in some areas, covers (18) are provided, preferably grids, metal plate parts, or plastic or glass parts.